Art Unit: 2815

IN THE DRAWINGS

Figure 7 contains an error, whereby the emitter of transistor (Q33) is missing a connection to the isolation terminal (ISO). The correct connection should show emitter (38) of transistor (Q33) coupled to the isolation region (ISO), as recited at p. 5, lines 16-17 of the specification, "transistor Q33 with ... emitter connected to the isolation region ISO." A corrected Figure 7 is presented herewith for the Examiner's consideration. The correction is shown on the figure in red. Review and approval of the corrected Figure 7 is respectfully requested. No new matter has been added in correcting the figure.

IN THE CLAIMS

Please amend claims 3 and 4, as shown below. No new matter is being added.

Applicant presents the claims as amended below and encloses a separate sheet indicating the amendments to the claims with bracketing and underlining.

- 3. (Amended) An integrated circuit according to claim 2, wherein said first bipolar transistor is a vertical transistor having an emitter formed by said substrate, a collector formed by a second doped region of the first conductivity type, and a base formed by a first doped region of the second conductivity type formed in the substrate and within the first doped region.
- 4. (Amended) An integrated circuit according to claim 3, wherein said first and third bipolar transistors are isolated from the substrate by said isolation region.

Please add the following new claims:

- 7. (New) A semiconductor device, comprising:
- (A) a vertical power component having a terminal formed by a substrate of a first conductivity type;
- (B) a control circuit, isolated from the substrate by an isolation region of a second conductivity type; and

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(C) a protection structure against polarity inversion of a substrate potential, comprising:

(i) a first bipolar transistor having an emitter connected to said isolation region and a collector connected to a reference potential input of the integrated circuit;

(ii) a bias circuit that biases the first bipolar transistor in a reverse saturation mode when the substrate is at a potential higher than a reference potential;

(iii) a second bipolar transistor having an emitter connected to the substrate and a base connected to the isolation region; and

(iv) a high impedance means that couples the isolation region to the substrate when the substrate potential is lower than the reference potential.

- 8. (New) The device of claim 7, wherein the second bipolar transistor forms a regulation loop that reduces parasitic transistor action from affecting the first bipolar transistor and the bias circuit.
- 9. (New) The device of claim 7, wherein the vertical power component comprises a vertical power bipolar transistor.

REMARKS

In response to the Office Action mailed August 28, 2001, the applicant respectfully equests reconsideration and submits the following remarks. Claims 3 and 4 have been amended, with no new matter being added thereby. Support for the amendments can be found in the specification, e.g., at p.6, lines 25-30 and at p.5, lines 31-32, as well as in Figure 7. Claims 3 and 4 have been rephrased and/or corrected to more accurately conform to the subject matter, as found in the specification and figures. Claims 7-9 are newly-added, with claims 8 and 9 depending from independent claim 7. No new matter has been added.

Claim Rejections under 35 U.S.C. §112

At paragraph 3 of the Office Action, claims 3-6 were rejected under 35 U.S.C. §112, first paragraph, as containing subject matter which was not described in the specification. The

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